

ABSTRACT OF THE DISCLOSURE

There is disclosed a method of storing substantial data integrating shape and physical properties comprising an external data input step (A) for inputting external data 12 consisting of boundary data of an object 1, an Octree division step (B) for dividing, by Octree division, the external data into cubical cells 13 which boundary surfaces are orthogonal to each other, and a cell data storage step (C) for storing the values of various physical properties for each of the cells. Furthermore, in the Octree division step (B), each of the divided cells 13 is classified to internal cells 13a located in the interior of the object, external cells 13b in the exterior thereof and boundary cells 13c including boundary surfaces. Thereby, substantial data integrating shape and physical properties can be stored in small storage capacity, whereby it is possible to manage shape, structure, physical-property information, and history of matter in a unified way, and to manage data associated with a series of processes of from design to work, assembly, test and evaluation under the same data, thus enabling the integration of CAD and simulation.

20058905.013002